

## **CHAPTER XIV - WELLHEAD PROTECTION OVERLAY DISTRICT (Ord. 602, 1/05)**

**A. What This Chapter Does.** This chapter is intended to protect the City's groundwater supply from contamination.

**B. Wellhead Protection Zones.** The **Wellhead Protection Overlay District (WPOD)** consists of two wellhead protection zones, which are shown on a supplement to the zoning map adopted in III.D.

1. Wellhead Protection Zone I includes the area within a 100-foot radius of a municipal well or the current control region identified in accordance with guidelines in the Source Water Protection Program (MDEQ, 1999) and approved by the Montana Department of Environmental Quality.
2. Wellhead Protection Zone II includes the area within which groundwater has an approximately three year time-of-travel to a municipal well or the current inventory region identified in accordance with guidelines in the Source Water Protection Program (MDEQ, 1999) and approved by the Montana Department of Environmental Quality.

All development on existing parcels of land and the creation of new parcels within the WPOD shall be consistent with the protection of groundwater resources, including existing underground storage tanks. Land uses and developments or improvements may not result in exposure of the source water used by the public water supply to moderate or high susceptibility to contaminant sources as determined by a susceptibility assessment completed pursuant to Section 5 of the Montana Source Water Protection Program (see Appendix J). In cases where development is proposed within a WPOD that has the potential to impact a public water supply, the zoning administrator may require the developer to conduct a susceptibility assessment as described in Appendix J.

**C. Land Use in Wellhead Protection Zones.** Table XIV.1. shows the additional land use regulations applicable in the wellhead protection zones.

### **D. Additional Performance Standards.**

**1. Gravel Mines, Other Excavations.** Gravel mines and similar excavations are prohibited in Wellhead Protection Zone I (see Table XIV.1.), but shall be permitted in Wellhead Protection Zone II, upon approval of a special use permit and compliance with the following additional performance standards.

- a. A 50 foot minimum vertical buffer shall be maintained between the bottom of the excavation and the water table. The developer shall drill one or more observation wells, or use any existing well(s) on the site to collect data and prepare a mining plan demonstrating that this buffer will be maintained. The mining plan must be submitted with the application for a special use permit.
- b. Surface runoff is channeled away from the excavation by vegetated berms and/or swales.
- c. No fuel or other hazardous material shall be stored in the excavated area or on the inward slope of the surrounding berms.
- d. An effective security fence shall be erected on the perimeter and the site shall be kept inaccessible when not in operation. The developer/operator is liable for the costs of clean-up if hazardous materials, septage, or other wastes are dumped on the site.
- e. The site shall be reclaimed in compliance with state law, with reclamation phased to minimize the extent of excavation open at any one time.

**2. Underground Storage Tanks, not including individual propane tanks for household use.** Table XIV.1.

and these performance standards apply to all underground storage tanks (USTs) in which fuel or other hazardous materials are or may be stored, including tanks that are not regulated by state or federal law. USTs are prohibited in Wellhead Protection Zone I, but may be permitted in Wellhead Protection Zone II, upon approval of a development or special use (where the UST is part of a proposed development that requires one) permit and compliance with applicable state and federal laws, and the following performance additional standards.

a. All USTs installed in Wellhead Protection Zone II shall have a complete secondary containment system.

b. All USTs installed in the Wellhead Protection Zone II shall be subject to monitoring by Lake County or the City, and to the payment of an annual fee, set by resolution of the Council/BOCC, to cover the costs of such monitoring.

**3. On-site Sewage Disposal.** On-site sewage disposal systems are prohibited within Zone 1. On-site sewage disposal systems are permitted within Zone II as described below.

a. For lots less than one acre in size that were in existence as of the time of adoption of this Chapter, on-site sewage disposal systems are permitted if three engineered barriers (described below) are installed.

b. No new lots less than one acre in size are permitted to have individual on-site sewage disposal systems.

c. For all lots between one and two acres in size, two engineered barriers are required.

d. For all lots between two and four acres in size, one additional engineered barrier is required.

e. For all lots over four acres in size, no additional engineered barriers are required unless specified in the Lake County On-Site Sewage Disposal regulations or other documents adopted by the City, Lake County and/or the Montana Department of Environmental Quality.

f. Engineered barriers for on-site sewage disposal systems include:

i. Level II (nutrient reduction) or advanced treatment technology.

ii. Established operation and maintenance plan with required pumping schedule including annual inspection by an independent qualified party. Reports shall be submitted to Lake County Environmental Health Dept.

iii. Pressure-dosed distribution systems.

iv. Soil investigation with soil boring(s) demonstrating presence of confining unit greater than 20 feet in thickness. (Confining unit is defined as a thick continuous layer of clay.

Table XIV.1 WPOD Land Use

<i>use/activity</i>	<i>Wellhead Protection Zone I</i>	<i>Protection Zone II</i>
floor drains, sumps and injection wells (not to include runoff catchments from roofs of individual homes)	PROHIBITED	PROHIBITED

Drainage from a building interior shall be through an approved sewage disposal system, with pre-treatment being provided as required by the City, Lake County, the Montana Dept of Environmental Quality or EPA.

generation, storage, or handling, of hazardous materials*	PROHIBITED	PROHIBITED
gravel mines, other excavations that are open for over six months	PROHIBITED	special use permit required, for additional performance standards see XIV.D.
storm sewers	PROHIBITED	permitted, in compliance with an approved runoff management plan: see XVIII.B.
on-site sewage disposal	PROHIBITED	permitted , see XIV.D.3
underground storage tanks	PROHIBITED	development permit required: for additional performance standards see XIV.D.

\*In quantities regulated by state and federal law.